

## Assigned questions-

wednesday nov 29

1- Back of yellow sheet 18.3 ques 1,2

2-Text p 562 17,18

thursday nov 30

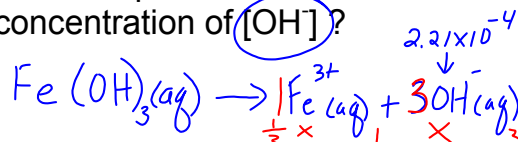
1- Back of yellow sheet Ksp 18.3 ques 3,4

2- Text p 565 23 and 24

Assignments passed out 18.2 for monday  
and 18.5 for tuesday

Nov 30-3:51 PM

Example 3: If iron(III)hydroxide  
has a Ksp of  $7.9 \times 10^{-16}$ , find the  
concentration of  $[\text{OH}^-]$ ?



$$K_{sp} = [\text{Fe}^{3+}(\text{aq})][\text{OH}^{-}(\text{aq})]^3$$

$$\frac{7.9 \times 10^{-16} \text{ mol}^4}{\text{L}^4} = \left(\frac{1}{3}x\right)^1 \left(x\right)^3$$

$$7.9 \times 10^{-16} \frac{\text{mol}^4}{\text{L}^4} = \frac{1}{3} x^4$$

$$3(7.9 \times 10^{-16} \frac{\text{mol}^4}{\text{L}^4}) = x^4$$

$$\sqrt[4]{2.37 \times 10^{-15} \frac{\text{mol}^4}{\text{L}^4}} = x$$

$$\sqrt[4]{x} = x$$

$$[\text{OH}^-] = 2.21 \times 10^{-4} \frac{\text{mol}}{\text{L}} = x$$

Mar 13-10:14 AM

Ex 4: Praseodymium (III) hydroxide is used to remove dye out of drinking water. Calculate the  $K_{sp}$  if a solution has a  $2.33 \times 10^{-6}$  mol/L concentration of hydroxide.

